



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,224	04/22/2004	Gi Seop Lee	0465-1133P	5946
2292	7590	10/11/2007	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				CIRIC, LJILJANA V
ART UNIT		PAPER NUMBER		
		3744		
NOTIFICATION DATE		DELIVERY MODE		
10/11/2007		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)
	10/829,224	LEE ET AL.
	Examiner Ljiljana (Lil) V. Ceric <i>RVC</i>	Art Unit 3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10/19/2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-11, 15-17, 20-22 and 25 is/are pending in the application.
 - 4a) Of the above claim(s) 12-14, 18, 19, 23 and 24 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-11, 15-17, 20-22 and 25 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 22 April 2004 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 20050812, 20060222.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of the third species or the embodiment of Figures 8A through 8C in the reply filed on October 19, 2006 is acknowledged. The traversal is on the ground(s) that the present application contains three species, which is a reasonable number of species and which does not place an undue burden on the examiner. This is not found persuasive because, absent an admission by the applicant that all three species are not patentably distinct from each other, the examiner would be unduly burdened by having to search and evaluate three distinct inventions instead of one.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 12 through 14, 18, 19, 23, and 24 are hereby withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to the non-elected second and third species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on October 19, 2006.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

4. The abstract of the disclosure is objected to because it uses phrases which can be implied (i.e., "The present invention relates to"). Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3744

6. Claims 1 through 11, 15 through 17, 20 through 22, and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims fail to conform with current U.S. practice, and appear to be a literal translation into English from a foreign document. Examples of idiomatic informalities in the claims are: "to an outside of the room" [claim 1, line 5; claim 15, line 7; claim 20, line 6; claim 25, line 5]; "have a fixed difference, always" [claim 11, line 2; claim 17, lines 1-2; claim 22, lines 1-2]; "in a state the indoor unit is stopped" [claim 15, lines 6]; and, "in the state the indoor unit is stopped" [claim 15, line 8].

The limitation "the first and second flow rates vary in a cycle" [claim 6, lines 1-2} is not clear as written. Is this limitation intended to mean that both flow rates vary cyclically, that both flow rates vary in the same manner AND cyclically, or that each flow rate varies cyclically but not necessarily in the same manner?

With regard to claim 7 as written, it is not clear what is meant by "the first and second flow rates vary many times *even in the cycle*".

The term "many" in claim 7 is a relative term which renders the claim indefinite. The term "many" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Thus, as used to qualify the number of times that the first and second flow rates vary in the cycle this term renders the same indefinite.

There is insufficient antecedent basis in the claims for the limitation "the indoor heat exchanger" as recited in each of claims 12, 14, and 24.

With regard to each of claims 11, 17, and 22 as written, it is not clear to which flow rate characteristics the limitation "a fixed difference" refers.

Art Unit: 3744

Each of base method claims 15 and 20 appears to have a word or words missing therefrom immediately following "comprising the steps of:"; the limitation immediately following "comprising the steps of" is a limitation reciting an apparatus and not a limitation reciting a step (i.e., "an indoor unit drawing and discharging room air, to cool or heat a room"), thus rendering indefinite the metes and bounds of protection sought by the claims.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. As best can be understood in view of the indefiniteness of the claims, claims 1 through 5, 8, 9, 20 through 22, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by CN 1317081 (made of record via IDS) or, alternately, its English-language equivalent (EP 1 114 970 A1, Daikin Industries, Ltd).

CN 1317081 and Daikin Industries, Ltd. each discloses a method for controlling air flow in an air conditioner (broadly readable on a ventilation system) essentially as claimed, including, for example, supplying outdoor air to a room at a first flow rate via air supply fan 24 and discharging room air from the room at a second flow rate which is higher than the first flow rate via exhaust fan 25. See exhaust rich operation in Table 1.

The reference thus reads on the claims.

9. Alternately and as best can be understood in view of the indefiniteness of the claims, claims 1 through 11, 20 through 22, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Guiles, Jr. (made of record via IDS).

Guiles, Jr. discloses a method for controlling air flow in an air conditioner essentially as claimed, including, for example, supplying outdoor air to a room at a first flow rate via air supply

Art Unit: 3744

fan 30 and discharging room air from the room at a second flow rate which is higher than the first flow rate via exhaust fan 64, as well as varying the flow rates in a cyclical/time-dependent fashion.

The reference thus reads on the claims.

Allowable Subject Matter

10. Claims 15 through 17 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ljiljana (Lil) V. Cirim whose telephone number is 571-272-4909. The examiner works a flexible schedule but can normally be reached between the hours of 10:30 a.m. and 6:30 p.m. on most weekdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Ljiljana (Lil) V. Cirim
Primary Examiner
Art Unit 3744